

# TRACIE

HEALTHCARE EMERGENCY PREPAREDNESS INFORMATION GATEWAY

Fatality Management Topic Collection 6/9/15



## **Topic Collection: Fatality Management**

According to the Centers for Disease Control and Prevention's Public Health Preparedness Capabilities: National Standards for State and Local Planning, "Fatality Management" is defined as, "the ability to coordinate with other organizations (e.g., law enforcement, healthcare, emergency management, and medical examiner/coroner) to ensure the proper recovery, handling, identification, transportation, tracking, storage, and disposal of human remains and personal effects; certify cause of death; and facilitate access to mental/behavioral health services to the family members, responders, and survivors of an incident." Mass fatality incidents are defined as those in which there are more bodies than can be handled using local resources. Since communities vary in size and resources, there is no minimum number of fatalities for an event to be considered a mass fatality incident. When planning for and responding to mass fatality events, it is the responsibility of healthcare and fatality management professionals to ensure the respectful and orderly management of deceased persons.

Each resource in this Topic Collection is placed into one or more of the following categories (click on the category name to be taken directly to that set of resources). Resources marked with an asterisk (\*) appear in more than one category.

Must Reads
Education and Training
Emergency Operations Planning
Evaluation and Studies
Guidelines and Protocols
Military Mortuary Affairs
News and Other Media Articles
Pandemic Influenza
Plans, Tools, and Templates
Agencies and Organizations

#### **Must Reads**

Centers for Disease Control and Prevention. (2011). Capability 5: Fatality Management.

This capability includes the definition of fatality management and identifies the five functions, along with specific tasks, that need to occur for public health agencies to achieve this capability. The five functions include the following: 1) determine the role for public health, 2) activate public health fatality management operations, 3) assist in the collection and dissemination of antemortem data, 4) participate in survivor mental/behavioral health services, and 5) participate in fatality processing and storage operations.



Defense Technical Information Center. (2011). Mortuary Affairs.

This document provides doctrine for mortuary affairs support in joint military operations. It highlights procedures for the search, recovery, evacuation (to include tracking of human remains), tentative identification, processing, and temporary interment of remains. It addresses both the responsibilities of the Department of Defense's mortuary affairs in regards to civil support duties under United States Northern Command, and those of other geographic combatant commanders. It also describes decontamination procedures for handling human remains, and the handling of personal effects of deceased and missing personnel.

Gershon, R.R., Orr, M.G., Zhi, Q, et al. (2014). <u>Mass Fatality Preparedness among Medical Examiners/Coroners in the United States: A Cross-Sectional Study.</u> BioMed Central Public Health. 14: 1275.

In the U.S., Medical Examiners and Coroners have the legal authority for the management of mass fatality incidents. The purpose of this study was: 1) to identify appropriate measures of preparedness as they relate to U.S. medical examiners and coroners, and 2) to assess their preparedness levels and factors significantly associated with preparedness.

Seattle and King County Public Health. (2012). All Hazards Mass Fatality Management Plan.

This plan describes a coordinated response among city and county agencies involved with conducting fatality management operations in Seattle and King County.

Seattle and King County Public Health, King County Medical Examiner, and Northwest Healthcare Response System. (2012). <u>Healthcare Mass Fatality Management Guidelines</u>.

This document provides guidelines for healthcare professionals on pronouncing, reporting, and certifying death. It also addresses topics such as cultural considerations, death investigation, tracking of human remains, personal effects, care of human remains, communications with families, and health risks associated with human remains.

U.S. Army Research Development and Engineering Command, Military Improved Response Program, and U.S. Department of Justice, Office of Justice Programs, Office for Domestic Preparedness. (2005). <u>The Capstone Document: Mass Fatality Management for Incidents Involving Weapons of Mass Destruction.</u>

This report is geared towards fatality management professionals who may be called upon to respond to domestic and international acts of terrorism. It provides a comprehensive review of forensic issues associated with managing contaminated human remains of known toxic agents.



Wiersema, J., Woody, A. (2014). <u>Mass Fatality Management: A Multi-Disciplinary Approach to Preparedness and Response.</u> (Free registration required.) University of Washington, Northwest Center for Public Health Practice.

This one-hour webinar features representatives from the Harris County Institute of Forensic Sciences in Texas, who share their experiences in developing partnerships and protocols to manage mass fatalities. They discuss the various components of mass fatality management, the primary agency responsible for coordinating each operational component, and the current challenges of the medicolegal system and their potential effects on mass fatality incident response.

## **Education and Training**

\*Butcher, B. (2013). <u>Emergency Preparedness and Management of Mass Fatalities: Pandemic Influenza.</u> (Free registration required.) Columbia University, Earth Institute, National Center for Disaster Preparedness.

This online course provides an overview of the core issues in Mass Fatality Management Operations as they apply to pandemic influenza. It presents mass fatality plans tailored toward H5N1, with a particular emphasis on the challenges faced by staff during such events. The course provides specific strategies and plans that can be used to better handle surge capacity during pandemics.

Butcher, B. (2013). Mass Fatality Management: A NYC [New York City] Perspective. (Free registration required.) Columbia University, Earth Institute, National Center for Disaster Preparedness.

This online course provides an overview of the core issues in Mass Fatality Management Operations. It describes the definition of mass fatality management, and provides primary objectives, roles and responsibilities, newest state-of-the-art technologies that facilitate mass fatality management, and the critical role of the Disaster Victim Identification Unit. It also defines where Mass Fatality Management Operations fit within emergency support functions and the National Incident Management System.

Costantino, K., Vertes, D., Malone, J. (2010). Mass Fatality Events: Learning from the Flight 3407 Tragedy. (Requires free registration and RealPlayer.) University at Albany, State University of New York, School of Public Health and Health Professions, Center for Public Health Preparedness.

The speakers in this webinar discuss the 2009 crash of Flight 3407 in a residential area of Buffalo, New York, in which numerous agencies worked to respond to and recover from this incident. Speakers from the Erie County Department of Health, including the Medical Examiner's office, discuss their experiences as they fulfilled their roles during response and recovery efforts.



Florida Department of Health, Bureau of Preparedness and Response. (n.d.). <u>Fatality</u>
<u>Management for Healthcare Settings: All-Hazard Disasters Including Pandemic.</u>
(Accessed 6/8/2015.)

This PowerPoint presentation offers a basic understanding of mass fatality management in the hospital setting. Topics covered include: basics of fatality management resource, death care responsibility, hospital planning, and hospital-based issues.

Goldbaum, G. (2014). <u>Public Health's Response to the Oso Mudslide.</u> (Free registration required.) University of Washington, Northwest Center for Public Health Practice.

This one-hour webinar features Gary Goldbaum of the Snohomish Health District who shares how his health district worked with partner agencies in response to the Oso, Washington mudslide in March 2014. He also discusses the roles of public health when responding to a mass fatality disaster, key barriers to effective response during a mass fatality disaster, strategies for overcoming those barriers, and key partners for assuring effective response to a mass fatality disaster.

Luna, M. (2008). <u>Dead or Alive: Managing Both in Mass Fatality Incidents.</u> (Free registration required.) University of Washington, Northwest Center for Public Health Practice.

This one-hour course is intended for local and state public health practitioners, public health nurses, local and state emergency management staff, medicolegal death investigators, and funeral professionals. The course discusses the importance of local jurisdictions developing a fatality management infrastructure to include a multi-disciplinary approach. It also addresses the importance of identifying and returning the dead to their families, and using the best practices to protect workers in the aftermath of such an event.

Straight, A., Baker, K., Donald, C., et al. (2014). <u>Using Electronic Death Registration Systems</u> (EDRS) to Conduct "Real-Time" <u>Disaster Mortality Surveillance</u>. (Free registration required.) National Association of County and City Health Officials (NACCHO).

This webinar shares information on how states are using existing electronic death registration systems (EDRS) for active disaster response and surveillance, and EDRS' role in mass fatality planning. Speakers from Oklahoma, New York City, and Alabama health departments describe their experiences with disaster response in their jurisdictions. They also discuss a conceptual framework to leverage EDRS and other available databases to develop an electronic national disaster mortality surveillance system and outline the steps states can take to assist with that effort.

University of Minnesota Center for Public Health Preparedness. (n.d.) <u>Mass Fatalities: Public Health Emergency Training Module.</u> (Accessed 6/8/2015.) (Free registration required.)

This online training module defines mass fatalities incidents, describes the operational sites and roles involved in responses to these types of disasters, and identifies key issues



related to planning and implementing response efforts. This module will take between 20-40 minutes to complete.

Wiersema, J., Woody, A. (2014). <u>Mass Fatality Management: A Multi-Disciplinary Approach to Preparedness and Response.</u> (Free registration required.) University of Washington, Northwest Center for Public Health Practice.

This one-hour webinar features representatives from the Harris County Institute of Forensic Sciences in Texas, who share their experiences in developing partnerships and protocols to manage mass fatalities. They discuss the various components of mass fatality management, the primary agency responsible for coordinating each operational component, and the current challenges of the medicolegal system and their potential effects on mass fatality incident response.

### **Emergency Operations Planning**

Centers for Disease Control and Prevention. (2011). Capability 5: Fatality Management.

This capability includes the definition of fatality management and identifies the five functions, along with specific tasks, that need to occur for public health agencies to achieve this capability. The five functions include the following: 1) determine the role for public health, 2) activate public health fatality management operations, 3) assist in the collection and dissemination of antemortem data, 4) participate in survivor mental/behavioral health services, and 5) participate in fatality processing and storage operations.

Federal Emergency Management Agency. (2013). <u>National Incident Management System:</u>
<u>Intelligence/Investigations Function Guidance and Field Operations Guide.</u>

This document provides guidance on utilizing and integrating the Intelligence/ Investigations Function of the National Incident Management System. It describes how this function fits into the Unified Command or Incident Command System, which may include the Mass Fatality Management Group, along with other groups/branches, such as forensic, intelligence, missing persons, and investigative. It also provides a list of roles and responsibilities of the Mass Fatality Management Group.

Gursky, E.A., Fierro, M.F. (2011). <u>Death in Large Numbers: The Science, Policy, and Management of Mass Fatality Events.</u> (Book available for purchase.) American Medical Association.

This book provides key information for those responsible for preparedness, response, and recovery operations in catastrophic incidents with mass fatalities. The book covers three main topics as they relate to mass fatality events: science, policy, and management.



Kilbane, E.M. (2015). <u>Fatality Management Federal Perspective: Operational Medicine/National Disaster Medical System.</u> U.S. Department of Health and Human Services, Office of the Assistant Secretary for Preparedness and Response.

Emergency Support Function #8 of the National Response Framework establishes the U.S. Department of Health and Human Services as the lead and coordinating agency for federal response in disasters for Fatality Management. This PowerPoint presentation addresses the Federal role in fatality management and provides an overview of priorities during the immediate, response, and recovery phases of a mass fatality event.

World Health Organization, Public Health England, and Partners. (2013). <u>Emergency Risk Management for Health: Mass Casualties/Dead Bodies.</u>

This factsheet emphasizes that larger-scale disasters may result in tens of thousands of deaths (e.g., the 2010 earthquake in Haiti) while smaller-scale disasters may exceed the local capacities for mass fatality management. It also addresses the health risks to the general public, including the negative mental health effects that mass casualty events can have on community members and responders.

#### **Evaluation and Studies**

Christenson, M.L., Geiger, S.D., and Anderson, H.A. (2013). <u>Heat-related Fatalities in Wisconsin during the Summer of 2012.</u> WMJ. 112(5):219-23.

The authors of this study conducted a case series of 27 heat-related fatalities in Wisconsin during summer 2012, which ranked the hottest year on record for the contiguous U.S., and the fourth warmest July in Wisconsin. They provide their findings from data they analyzed from death certificates and coroner reports to characterize factors that increase vulnerability to heat-related fatality.

\*Doshi, S.S., Stauffer, K.E., Parker Fiebelkorn, A., et al. (2012). The Burden and Severity of Illness due to 2009 Pandemic Influenza A (H1N1) in a Large US City during the Late Summer and Early Fall of 2009. American Journal of Epidemiology. 15;176(6):519-26.

The authors of this study evaluated the burden of the pandemic H1N1 outbreak in metropolitan Atlanta, Georgia, in the fall of 2009, when there was a second wave of increased influenza activity in the United States. They used data from a community survey, existing surveillance systems, public health laboratories, and local hospitals to estimate numbers of pandemic H1N1-associated illnesses, emergency department visits, hospitalizations, intensive care unit admissions, and deaths. More specifically, data from the Centers for Disease Control and Prevention's 122 Cities Mortality Reporting System surveillance was used to estimate deaths due to pandemic H1N1. The authors estimated 63 adult and four pediatric pandemic H1N1-associated deaths in metro-Atlanta during the investigation time frame.



- Gershon, R.R., Orr, M.G., Zhi, Q, et al. (2014). <u>Mass Fatality Preparedness among Medical Examiners/Coroners in the United States: A Cross-Sectional Study.</u> BioMed Central Public Health. 14: 1275.
  - In the U.S., Medical Examiners and Coroners have the legal authority for the management of mass fatality incidents. The purpose of this study was: 1) to identify appropriate measures of preparedness as they relate to U.S. medical examiners and coroners, and 2) to assess their preparedness levels and factors significantly associated with preparedness.
- Morgan, O.W., Sribanditmongkol, P., Perera, C., et al. (2006). <u>Mass Fatality Management Following the South Asian Tsunami Disaster: Case Studies in Thailand, Indonesia, and Sri Lanka</u>. PLOS Medicine. 3(6).

The authors of this report conducted three descriptive case studies after the tsunami disaster in December 2004 to systematically document how the deceased were managed in Thailand, Indonesia, and Sri Lanka. The following parameters were considered: body recovery and storage, identification, disposal of human remains, and health risks from dead bodies. Through their case studies, the authors found the following: refrigeration for preserving human remains was not available soon enough after the disaster, none of the countries had sufficient forensic capacity to identify thousands of victims, and the lack of national or local mass fatality plans limited the quality and timeliness of response.

#### **Guidelines and Protocols**

The Technical Working Group for Mass Fatality Forensic Identification. (2005). Mass Fatality

Incidents: A Guide for Human Forensic Identification. U.S. Department of Justice, Office of Justice Programs, National Institute of Justice.

This guide addresses issues facing medical examiners, coroners, and other forensic professionals involved in the identification of human remains resulting from a mass fatality incident. It is designed to assist all jurisdictions in creating new mass fatality plans or reviewing existing plans.

U.S. Army Research Development and Engineering Command, Military Improved Response Program, and U.S. Department of Justice, Office of Justice Programs, Office for Domestic Preparedness. (2005). <u>The Capstone Document: Mass Fatality Management for Incidents Involving Weapons of Mass Destruction.</u>

This report is geared towards fatality management professionals who may be called upon to respond to domestic and international acts of terrorism. It provides a comprehensive review of forensic issues associated with managing contaminated human remains of known toxic agents.



Wood, C.M., DePaolo, F., Whitaker, R.D. (2007). <u>Guidelines for Handling Decedents</u>

Contaminated with Radioactive Materials. Centers for Disease Control and Prevention.

These guidelines are intended for medical examiners, coroners, funeral directors, and other mortuary affairs staff. The authors discuss how to manage radioactively contaminated decedents so that medical professionals can deal with issues such as surface contamination, internal contamination, and shrapnel.

World Health Organization, Pan American Health Organization. (2006). Management of Dead Bodies after Disasters: A Field Manual for First Responders.

This field manual describes the recovery, basic identification, and storage and disposal of dead bodies following disasters. It also provides information about working with family members, the public, and the media.

## **Military Mortuary Affairs**

\*Defense Technical Information Center. (2011). Mortuary Affairs.

This document provides doctrine for mortuary affairs support in joint military operations. It highlights procedures for the search, recovery, evacuation (to include tracking of human remains), tentative identification, processing, and temporary interment of remains. It addresses both the responsibilities of the Department of Defense's mortuary affairs in regards to civil support duties under United States Northern Command, and those of other geographic combatant commanders. It also describes decontamination procedures for handling human remains, and the handling of personal effects of deceased and missing personnel.

#### **News and Other Media Articles**

Gavin, C.S., and Nesler, J.T. (2013). <u>National Thought Leadership Group Develops Complex</u> and <u>Mass Fatality Management Papers, Including Key Prescriptives.</u> International Association of Emergency Managers Bulletin. Volume 30(5):26-28.

The authors discuss both the importance and complexities of mass fatality management. They explain how the complexities arise from a variety of factors, which include public expectations, perceptions, and the extent to which responding agencies are capable of organizing a safe, respectful, and timely response. The authors also discuss the need to apply a more scientific approach to mass fatality management preparedness planning, training, and exercises.

Page, D. (2005). Life in a Disaster Morgue. Forensic Magazine.

The author of this article describes the experiences and response tasks of a forensic dental team, the Disaster Mortuary Operational Response Team (DMORT), and other mortuary affairs professionals, following Hurricane Katrina.



Ralph, T. (n.d.). Mass Fatality Management. (Accessed 6/8/2015.) Disaster Resource Guide.

This article addresses the three major operational areas in a mass fatality incident response: Search and Recovery, Morgue Operation, and Family Assistance.

Sullivan, J. (2014). <u>Toll Remains 17: Why Identifying Victims Seems to Take so Long.</u> The Seattle Times.

This article discusses the process in which Snohomish County officials identified victims of the 2014 mudslide. The author highlights the protocols for handling the remains, and for making public announcements regarding the number of confirmed deaths.

#### Pandemic Influenza

\*Butcher, B. (2013). <u>Emergency Preparedness and Management of Mass Fatalities: Pandemic Influenza.</u> (Free registration required.) Columbia University, Earth Institute, National Center for Disaster Preparedness.

This online course provides an overview of the core issues in Mass Fatality Management Operations as they apply to pandemic influenza. It presents mass fatality plans tailored toward H5N1, with a particular emphasis on the challenges faced by staff during such events. The course includes specific strategies and plans that can be used to better handle surge capacity during pandemics.

\*Doshi, S.S., Stauffer, K.E., Parker Fiebelkorn, A., et al. (2012). <u>The Burden and Severity of Illness due to 2009 Pandemic Influenza A (H1N1) in a Large US City during the Late Summer and Early Fall of 2009.</u> American Journal of Epidemiology. 15;176(6):519-26.

The authors of this study evaluated the burden of the pandemic H1N1 outbreak in metropolitan Atlanta, Georgia, in the fall of 2009, when there was a second wave of increased influenza activity in the United States. They used data from a community survey, existing surveillance systems, public health laboratories, and local hospitals to estimate numbers of pandemic H1N1-associated illnesses, emergency department visits, hospitalizations, intensive care unit admissions, and deaths. More specifically, data from the Centers for Disease Control and Prevention's 122 Cities Mortality Reporting System surveillance was used to estimate deaths due to pandemic H1N1. The authors estimated 63 adult and four pediatric pandemic H1N1-associated deaths in metro-Atlanta during the investigation time frame.

Hardin, L., and Noller, A. (n.d.). <u>Information for Managing Pandemic Influenza Fatality Events in Virginia.</u> (Accessed 5/21/2015.) Virginia Department of Health.

This booklet can assist local authorities in preparing to manage the increased number of deaths due to a natural disease pandemic. It provides information on when flu deaths should be reported for investigation by the medical examiner system, planning



considerations, and protocols for managing mass fatality events (e.g., pronouncement of death, certification of death, filing death certificates, identifying decedents, handling and tracking remains, managing personal effects, and final disposition of remains).

\*New York State Department of Health, and the New York State Emergency Management Office (2011). New York State Guidance: County Mass Fatality Annex with Emphasis on Pandemic Influenza Preparedness.

This plan is a guidance document for counties within New York State. It addresses the preparation and strategies required for potential mass fatality events, with a specific focus on pandemic influenza planning.

\*Ohio Department of Health, Office of Health and Vital Statistics. (2010). <u>Pandemic Influenza Mass Fatality Response Guidance.</u>

This guidance document includes templates and other tools (e.g., resources checklist, incident command structure, and forms) to assist local jurisdictions with mass fatality planning during a pandemic event.

Pearsol, J. (2009). Ohio Pandemic Influenza Public Engagement Demonstration Project: Mass <u>Fatality Management.</u> Ohio State University, College of Public Health, Center for Public Health Practice.

This report, a product of a series of meetings with stakeholders and public representatives, describes a project that was conducted to help state and local level decision-makers manage response and recovery plans concerning mass fatalities as a result of an outbreak of H1N1 in Ohio in 2009.

Stanley, S. (2008). <u>Regional Mass Fatality Management in Pandemic Surge.</u> Naval Postgraduate School, Monterey, CA.

This thesis explores pathways to reach operational regional mass fatality management capability in Ohio, but also has implications for planning across the nation. Research was conducted with three key stakeholder groups: county coroners, emergency management directors, and health commissioners. The survey addressed realistic and actionable mass fatality management planning by: 1) identifying state guidance gaps; 2) identifying local/regional operational gaps; 3) assessing regional resource capabilities; 4) categorizing proposed solutions to address identified gaps; and 5) listing legal, financial, and organizational barriers to the solutions.

#### Plans, Tools, and Templates

\*Defense Technical Information Center. (2011). Mortuary Affairs.

This document provides doctrine for mortuary affairs support in joint military operations. It highlights procedures for the search, recovery, evacuation (to include tracking of human remains), tentative identification, processing, and temporary interment of remains.



It addresses both the responsibilities of the Department of Defense's mortuary affairs in regards to civil support duties under United States Northern Command, and those of other geographic combatant commanders. It also describes decontamination procedures for handling human remains, and the handling of personal effects of deceased and missing personnel.

Forrester, C., Dixon, R., Judy, Caroline, et al. (2008). <u>Managing Mass Fatalities: A Toolkit for Planning</u>. Santa Clara County Public Health Department.

This toolkit provides scalable and operational tools to help guide jurisdictions in developing a mass fatality plan. It includes guidance on infection and other health and safety threats, as well as requirements and recommendations for managing mass fatalities during a worst-case scenario pandemic influenza event.

Gavin, C.S. (2009). <u>All Hazards Mass Fatality Management Plan.</u> The City of New York Office of Chief Medical Examiner.

This plan was developed to help manage mass fatality incidents resulting from various types of disasters. It outlines processes on decision making, citywide coordination, response strategies, and internal agency command and control strategies and operations.

Gavin, C.S. (2008). Mass Fatality Management Guideline Annex: Pandemic Influenza Surge Plan for Managing In- and Out-of-Hospital Deaths. The City of New York Office of Chief Medical Examiner.

This plan was developed to help manage a surge in deaths that may result from an influenza pandemic affecting New York City. This plan is an annex to the City of New York All Hazards Mass Fatality Management Plan, which outlines the City's all-hazard response strategy for managing mass fatality operations.

Los Angeles County Emergency Medical Services Agency. (2013). <u>Mass Fatality Management Guide for Healthcare Entities.</u>

This planning document was created to help healthcare partners develop a detailed mass fatality plan. It provides a framework for mass fatality management during events of all sizes, including large-scale disasters (earthquakes); smaller, more localized incidents (explosion, shooting); and long-term events (widespread disease outbreaks). It is organized into two primary components, a base guide and appendices. The base guide provides step-by-step directions in the development of mass fatality plans, and the appendices include supplemental resources to aid in plan development.



\*New York State Department of Health, and the New York State Emergency Management Office (2011). New York State Guidance: County Mass Fatality Annex with Emphasis on Pandemic Influenza Preparedness.

This plan is a guidance document for counties within New York State. It addresses the preparation and strategies required for potential mass fatality events, with a specific focus on pandemic influenza planning.

\*Ohio Department of Health, Office of Health and Vital Statistics. (2010). <u>Pandemic Influenza</u> Mass Fatality Response Guidance.

This guidance document includes templates and other tools (e.g., resources checklist, incident command structure, and forms) to assist local jurisdictions with mass fatality planning during a pandemic event.

Seattle and King County Public Health. (2012). All Hazards Mass Fatality Management Plan.

This plan describes a coordinated response among city and county agencies involved with conducting fatality management operations in Seattle and King County.

Seattle and King County Public Health. (2011). <u>King County All Hazard Mass Fatality Plan</u>
Attachment – Concept of Operations – Community Responsibilities.

This resource is an attachment to the Seattle and King County All Hazards Mass Fatality Management Plan. It includes several templates and other tools including, but not limited to: a template mass fatality plan, a mass fatality management flow chart for healthcare facilities, a sample and information on decent identification tags, a decedent information form, a personal affects tracking form, and job action sheets.

Seattle and King County Public Health, King County Medical Examiner, and Northwest Healthcare Response System. (2012). Healthcare Mass Fatality Management Guidelines.

This document provides guidelines for healthcare professionals on pronouncing, reporting, and certifying death. It also addresses topics such as cultural considerations, death investigation, tracking of human remains, personal effects, care of human remains, communications with families, and health risks associated with human remains.

Sledzik, P. (2002). <u>Flight 93 Morgue Protocols.</u> Disaster Mortuary Operational Response Teams (DMORT).

This document was developed by DMORT III to detail the mortuary operations for the United Airlines Flight 93 response on 9/11. It is intended to serve as an example of morgue protocols, and may be used to develop a local disaster morgue protocol as part of an overall mass fatality plan.



Utah Department of Health, and Utah Hospital and Health Systems Association. (2013).

Jurisdictional Mass Fatalities Management Template: A Statewide Plan and Guidance for Local Jurisdictions, Hospitals, Local Public Health, and Other Entities Involved in Mass Fatality Response in the State of Utah.

This plan was developed to fulfill Hospital Preparedness Program Grant objectives and can be used as a planning tool by other states and local jurisdictions.

World Health Organization, Pan American Health Organization. (2012). Mass Fatality Plan Checklist.

This checklist includes the essential elements for consideration by emergency management professionals as they develop a mass fatality plan. It is divided into 14 sections covering the following topics: introduction and purpose; activation; command and control; logistics; welfare; identification and notification; international dimensions; site clearance and recovery of deceased victims; mortuary; disposal final arrangements; chemical, biological, radiological, and nuclear events; public information and media policy; health and safety; and a disaster mortuary plan.

## **Agencies and Organizations**

**Note**: The agencies and organizations listed in this section have a page, program, or specific research dedicated to this topic area.

Alabama Department of Public Health. <u>Fatality Management during a Pandemic and Other Emergency Events.</u>

Scientific Working Group on Disaster Victim Identification. Disaster Victim Identification.

Southern Maine Regional Resource Center for Public Health Emergency Preparedness. Mass Fatality Management.

U.S. Department of Health and Human Services, Office of the Assistant Secretary for Preparedness and Response. <u>Disaster Mortuary Operational Response Teams (DMORTs).</u>

Virginia Department of Health, Office of the Chief Medical Examiner. <u>Information for Hospitals and Physicians.</u>

Virginia Department of Health, Office of the Chief Medical Examiner. Mass Fatality Planning.

This ASPR TRACIE Topic Collection was comprehensively reviewed in June 2015 by the following subject matter experts (listed in alphabetical order): **Cynthia S. Gavin**, MS, PMP, CCP, Biochem Sciences and Security Manager, Computer Sciences Corporation; **John Hick**, MD, HHS ASPR and Hennepin County Medical Center; **Edward M. Kilbane**, MD, JD, MPH, Fatalities Management, National Disaster Medical System, Office of Emergency Management;



and Victor Weedn, MD, JD, Professor and Chair, George Washington University, Department of Forensic Sciences.

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